

AMENDMENT TO THE SPECIFICATION

Please amend the paragraph beginning on page 3, line 13 as follows:

--As a substrate for GaN based crystal, sapphire, SiC, NGO, etc., are used; however, none of these substrates have the lattice constant that matches that of GaN, making it difficult to obtain coherent growth. Therefore, in a GaN layer that has been grown on such a substrate, a large number of dislocations (edge dislocations, screw dislocations, mixed dislocations) exist. For example, when a sapphire substrate is used, there exist approximately $1 \text{ } [] \times 10^9 \text{ cm}^{-2}$ dislocations. These dislocations decrease the luminous efficiency of an ultraviolet light emitting diode.--

Please amend the paragraph beginning on page 4, line 4 as follows:

--Fig. 9 is a partial enlarged view of Fig. 8 schematically showing the distribution of the dislocations in a GaN crystal that has been obtained by ELO. As shown in this figure, in the u-GaN layer 43, a large number of dislocations exist in the region X_1 located above the seed crystal 42, wherein the dislocation density thereof is approximately $1 \text{ } [] \times 10^9 \text{ cm}^{-2}$. In contrast, the region X_2 located on the dielectric mask 54 has fewer dislocations, wherein the dislocation density thereof is decreased to approximately $1 \text{ } [] \times 10^7 \text{ cm}^{-2}$. In this GaN crystal, the width of the dielectric mask 54 is approximately $4 \text{ }\mu\text{m}$ and the interval therebetween is approximately $12 \text{ }\mu\text{m}$. As described above, employing ELO makes it possible to form a crystal on the dielectric mask 54 that has a low dislocation density, reducing the crystal defects and improving the luminous efficiency of the ultraviolet light emitting diode. An example of a semiconductor light emitting device that has a region of low dislocation density, other than that described above, is disclosed in the specification of the European Patent Publication No. 1104031.--

Please amend the paragraph beginning on page 10, line 18 as follows:

--As described above, the concave portions 121 positioned beneath the light-shielding portions of the base electrode 21 and n-type electrode 24 have widths and intervals different ~~[[form]]~~ from those positioned beneath the emission detection surface. In other words, the concave portions 121 positioned beneath the light-shielding region L_1 where the base electrode 21 is formed and the light-shielding region L_2 where wire bonding is applied to the n-type electrode 24 have a smaller width than the other concave portions 121, i.e., those positioned beneath the region L_3 serving as an emission detection surface. The reason for this will be described in detail below; however, in brief, this is because the regions L_1 and L_2 have light shielding properties, and therefore, even when the dislocation density of the crystals below these region is high, it does not affect emission intensity; while it is necessary to enhance the mechanical strength of the structure of these crystals because wire bonding is applied to the regions L_1 and L_2 . In contrast, it is necessary to make the dislocation density of the crystal positioned beneath the region L_3 low in order to enhance emission intensity, and therefore the width of these concave portions 121 is increased.--

Please amend the paragraph beginning on page 11, line 16 as follows:

--Given the above consideration, it is preferable that the width β of the concave portions 121 beneath the region L_3 be at least twice that of the width α of the concave portions 121 beneath regions L_1 and L_2 . Preferable examples of the widths of the concave portions 121 include, for example, the width β of the concave portions 121 beneath the region L_3 being not less than $6\text{ }\mu\text{m}$ and not more than $20\text{ }\mu\text{m}$, and more preferably not less than $9\text{ }\mu\text{m}$ and not more than $12\text{ }\mu\text{m}$. In contrast, the width ~~[[a]]~~ α of the concave portions 121 positioned beneath the

regions L_1 and L_2 is preferably not less than $1\text{ }\mu\text{m}$ and not more than $6\text{ }\mu\text{m}$, and more preferably not less than $2\text{ }\mu\text{m}$ and not more than $4\text{ }\mu\text{m}$. Because the crystals beneath the regions L_1 and L_2 are required to have a structure having high mechanical strength, it is therefore preferable that the width $[\gamma]$ of the projecting portions 123 formed between the concave portions 121 be not less than $1\text{ }\mu\text{m}$ and not more than $6\text{ }\mu\text{m}$, and more preferably not less than $2\text{ }\mu\text{m}$ and not more than $4\text{ }\mu\text{m}$.--